

ADVANCED ENERGY STORAGE SYSTEMS



MaxLi⁺

LiFePO₄ Battery Pack
48V 100Ah

**BLUETOOTH
BATTERY
MONITORING**

LiFePO₄ Deep Cycle
12V-24V-48V/50Ah-100Ah

- » Actual voltage of the 48V range is 54V
- » Embedded BMS for optimal performance and safety
- » Communication - RS232/RS485/CANBUS & Pin out
- » Operating status recording function
- » Over/Under voltage protection
- » Over/Under charge protection
- » Cell temperature protection
- » Cell balancing function
- » Tier cell monitoring
- » Short circuit detection
- » 20+ years design life
- » Interface LCD for monitoring
- » Modular design up to 10 units in parallel on 48V range
- » High energy Density
- » Smart Device Bluetooth monitoring on 12V & 24V
- » Fast charge and discharging
- » No maintenance required
- » Free Wall mounting brackets for 48V range
- » Free RS communication cable included with 48V range
- » The True Fit & Forget Battery



Lithium Iron Phosphate (LiFePO4) Battery Specifications (Rack & Wall Mount)

Lithium Iron Phosphate (LiFePO4) Battery		YS-12-100-B	YS-24-100-B	YS-48-50 (W)	YS-48-70 (W)	YS-48-100 (W)
Electrical Characteristics	Nominal Voltage	12V	25.6V	48V	48V	48V
	Nominal Capacity	100Ah	100Ah	50Ah	70Ah	100Ah
	Energy	1280Wh	2560Wh	2400Wh	3360Wh	4800Wh
	Internal Resistance	≤ 20mΩ	≤ 20mΩ	≤ 50mΩ	≤ 50mΩ	≤ 50mΩ
	Cycle Life	> 8000 cycles @0.3C 100%DOD	> 8000 cycles @0.3C 100%DOD	> 8000 cycles @0.3C 100%DOD	> 8000 cycles @0.3C 100%DOD	> 8000 cycles @0.3C 100%DOD
	Months Self Discharge	< 3%	< 3%	< 3%	< 3%	< 3%
	Efficiency of Charge	100% @0.5C	100% @0.5C	100% @0.2C	100% @0.2C	100% @0.2C
	Efficiency of Discharge	96~99% @1C	96~99% @1C	96~99% @0.5C	96~99% @0.5C	96~99% @0.5C
Standard Charge	Charge Voltage	14.4±0.1V	28.8±0.1V	54.8±0.1V	54.8±0.1V	54.8±0.1V
	Charge Mode	0.2C to 14.4V, then 14.4V, charge current to 0.02C(CC/CV)	0.2C to 28.2V, then 28.8V, charge current to 0.02C(CC/CV)	0.2C to 54.8V, then 54.8V, charge current to 0.02C(CC/CV)	0.2C to 54.8V, then 54.8V, charge current to 0.02C(CC/CV)	0.2C to 54.8V, then 54.8V, charge current to 0.02C(CC/CV)
	Charge Current	80A	80A	25A	50A	50A
	Max. Charge Current	100A	100A	50A	70A	80A
	Charge Cut-off Voltage	15.0V±0.1V	30.0V±0.1V	58.5V±0.1V	58.5V±0.2V	58.5V±0.2V
Standard Discharge	Continuous Current	100A	100A	40A	60A	80A
	Max continuous discharge current	300A(<3s)	300A(<3s)	50A	70A	100A
	Discharge Cut-off Voltage	10V	20V	40.0V	40.0V	40.0V
Environmental	Charge Temperature	0°C to 45°C (32F to 113F) @60±25% Relative Humidity	0°C to 45°C (32F to 113F) @60±25% Relative Humidity	0°C to 45°C (32F to 113F) @60±25% Relative Humidity	0°C to 45°C (32F to 113F) @60±25% Relative Humidity	0°C to 45°C (32F to 113F) @60±25% Relative Humidity
	Discharge Temperature	-20°C to 60°C (-4F to 140F) @60±25% Relative Humidity	-20°C to 60°C (-4F to 140F) @60±25% Relative Humidity	-20°C to 60°C (-4F to 140F) @60±25% Relative Humidity	-20°C to 60°C (-4F to 140F) @60±25% Relative Humidity	-20°C to 60°C (-4F to 140F) @60±25% Relative Humidity
	Storage Temperature	0°C to 40°C (32F to 104F) @60±25% Relative Humidity	0°C to 40°C (32F to 104F) @60±25% Relative Humidity	0°C to 40°C (32F to 104F) @60±25% Relative Humidity	0°C to 40°C (32F to 104F) @60±25% Relative Humidity	0°C to 40°C (32F to 104F) @60±25% Relative Humidity
	Water Dust Resistance	IP56	IP56	IP56	IP56	IP56
Mechanical	Cell & Method	IFR32700 6Ah 4S17P	IFR32700 6Ah 8S17P	32700 6Ah 15S9P	32700 6Ah 15S12P	32700 6Ah 15S17P
	Shell material	ABS	ABS	Iron(SGCC)	Iron(SGCC)	Iron(SGCC)
	Dimensions (mm.)	260 x 173 x 217	522 x 240 x 220	412 x 438 x 135 (19" rack mount)	450 x 438 x 178 (19" rack mount)	650 x 438 x 178 (19" rack mount)
	Weight (lbs./kg.)	Approx: 12.2Kg	Approx: 22Kg	Approx: 31Kg	Approx: 40Kg	Approx: 56Kg
	Terminal/Gravimetric specific energy	M8	M8	85WH/KG	85WH/KG	85WH/KG
	Protocol (optional)	-	-	RS485/RS232/CANBus	RS485/RS232/CANBus	RS485/RS232/CANBus
	In parallel	Max 4	Max 4	Max 10	Max 10	Max 10
	Monitoring	Bluetooth Monitoring	Bluetooth Monitoring	LCD Interface & LED	LCD Interface & LED	LCD Interface & LED